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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,007	10/10/2003	Gary C. Marsden	15436.250.23.1	3209

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WORKMAN NYDEGGER
(F/K/A WORKMAN NYDEGGER & SEELEY)
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER

EL SHAMMAA, MARY A

ART UNIT

PAPER NUMBER

2883

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/684,007	Applicant(s) MARSDEN, GARY C.	
	Examiner Mary A. El-Shammaa	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 12-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 38-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7-11, 41, 38-40, and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Kinoshita et al. (US 7,075,712 B2).

Regarding claims 1, 9, 41 and 42, Kinoshita discloses in at least figure 12A an optical system comprising an optical filter (684); a first optical isolator (680 to the right of filter 684) in optical communication with one side of the optical filter (684); a second optical isolator (680 to the left of filter 684) in optical communication with an opposite side of the optical filter; and a light disposer (optical terminators placed on ports 700 – see at least column 18, lines 30-34) in optical communication with the first optical isolator (680) and arranged such that the light disposer and first optical isolator collectively define a portion of an optical path associated with a signal from the optical filter.

Regarding claims 7, 8, 10, and 11, Kinoshita discloses in at least column 2, lines 30-43, the system being configured to be a multiplexer and demultiplexer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 5, 6, 43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. (US 7,075,712 B2) in view of Sridhar (US 5,778,118).

Regarding claims 2 and 43, Kinoshita does not disclose an interference optical filter.

However, Sridhar discloses in figures 1-3 an optical multiplexer/demultiplexer system that can be figured as both a multiplexer and a demultiplexer comprising: an interference optical filter (40); a first optical isolator (90) in optical communication with one side of the optical filter (40); a second optical isolator in optical communication with an opposite side of the optical filter; and a light disposer (67) in optical communication with the first optical isolator (see abstract; col. 3, lines 5-41; col. 4, lines 1-35; col. 5, lines 23-32 and 53-58; col. 6, lines 2-42; col. 7, lines 54-67; col. 8, lines 2-4 and 40-61; col. 9, lines 7-30). One would be motivated to use an interference optical filter to minimize the interference in the system.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the interference optical filter taught by Sridhar in the system of Kinoshita so as to minimize interference in the system.

Regarding claims 5, 6, 45, and 46, Kinoshita does not disclose the light disposer comprising a baffle or a conveyance, wherein the conveyance is selected from the group consisting of mirrors, lenses, fibers, waveguides, rhombs, total internal reflectors, and combinations thereof.

However, Sridhar discloses the light disposer (67) comprising a baffle or a conveyance, wherein the conveyance is selected from the group consisting of mirrors, lenses, fibers, waveguides, rhombs, total internal reflectors, and combinations thereof (col. 6, lines 24-37).

Claims 3 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. (US 7,075,712 B2) in view of Zhang (US 5,548,608).

Regarding claim 3, Kinoshita does not disclose the isolators comprising both a polarizing beam splitter and a quarter-wave plate.

However, Zhang discloses isolators that comprise a polarizing beam splitter and a quarter-wave plate (col. 8, lines 59-63). One would be motivated to use the isolator taught by Zhang is so as to only transmit the desired wavelengths.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the isolators taught by Zhang because Zhang teaches that such an isolator negates interference.

Claims 4 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita et al. (US 7,075,712 B2).

Regarding claim 4, Kinoshita discloses the claimed invention except for the isolators imparting a non-normal incident angle to input light beams. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the isolators impart a non-normal incident angle to input light beams, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. The motivation to have the isolators impart a non-normal incident angle to input light beams is so as to maximize transmission.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2883

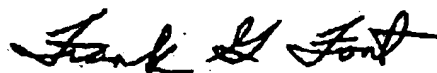
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary A. El-Shammaa whose telephone number is 571.272.2469. The examiner can normally be reached on M-F (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571.272.2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAE
March 4, 2007


Frank G. Font
Supervisory Patent Examiner
Technology Center 2800